

I.B.D. → 3-7-96

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Via UPS Overnight Mail

October 20, 2011

Mr. Edwin Bakowski, Manager, Permit Section
Illinois Environmental Protection Agency
Bureau of Air (MC 11)
1021 N. Grand Avenue East
Springfield, IL 62702

Koppers Inc.
Carbon Materials and Chemicals
3900 South Laramie Avenue
Cicero, IL 60804-4523
Tel 708 222 3483
Fax 708 656 6079
www.koppers.com

RE: Construction Permit Application: #2 Tube Heater Reconstruction
Koppers Inc. Stickney Plant
ID No. 031300AAJ
CAAPP Permit No. 96030134

Dear Mr. Bakowski:

Please find enclosed Koppers Inc. Stickney Plant Construction Permit application for the #2 Tube Heater reconstruction. The #2 heater will be rebuilt approximately 20 feet south on the existing foundation and casing of the former Naphthalene Heater F001.

This new heater will serve the existing #2 still (TPDS2) in the tar distillation process and will be called the #2 Tube Heater (F201). The Koppers Inc. Naphthalene Heater F001 was originally permitted with the IEPA in 1979. Naphthalene Heater F001 was taken out of service and mothballed in the late 1980's. At the time of the application for the initial Clean Air Act Permit Program (CAAPP) permit in the early 1990's, Koppers chose to keep the Naphthalene heater out of service and did not include in the CAAPP permit application.

Koppers is now planning to idle and decommission the existing #2 Tube Heater (F201) that serves the #2 still in the tar distillation process. Koppers will recommission the foundation and casing of former Naphthalene Heater F001 and pipe it to the #2 still (TPDS2) renaming it #2 Tube Heater (F201). New components to be installed include a 14 MMBtu/hr natural gas burner, a fuel train, an economizer, a replacement coil (spare or new), and a new exhaust stack. These expenditures are estimated to be \$400,000, approximately 40% of a completely new tube heater.

The existing #2 Tube Heater also burns process gases from the #2 still (TPDS2). The reconstructed #2 Tube Heater will be used in an identical way once it replaces the original #2 Tube Heater. This project requires no changes to the #2 Still unit and emissions generated from combustion of the still process gases will remain as permitted in the CAAPP Permit number 96030134.

We are seeking an expedited review from your agency in order for Koppers to commence construction as soon as approval is granted.

Enclosed is Koppers Inc. check for \$4000 to cover the construction permit application fee for the reconstruction of the #2 Tube Heater (F201). If you have any questions or require further information, please contact Stephanie Flynn, Plant Environmental Manager at 708-222-3481.

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OCT 24 2011

Sincerely,

A handwritten signature in black ink, appearing to read "Richard W. Wagner", with a large, sweeping flourish at the end.

Richard W. Wagner
Koppers Inc.
Stickney Plant Manager

Enclosure

cc: T. Self, Koppers Inc. Pittsburgh
R. Wagner, Koppers Inc. Stickney
S. Flynn, Koppers Inc. Stickney
G. Traczek, Koppers Inc. Pittsburgh
B. Evans, P.E; ERM, Inc.

Attachments: Attachment 1: Construction Permit Application

**Table of Contents
#2 Tube Heater Reconstruction
Air Permit Application**

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9-18	220-CAAPP Form
19-29	240-CAAPP Form
30-34	215-CAAPP Form
35	Attachment A – Project Description
36-39	Exhibit 240-5 and 6 Emission Calculations
40-41	Crude Tar Distillation Process Flow Diagram
42	Facility Site Map – Location of #2 Tube Heater Reconstruction



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

**FEE DETERMINATION FOR
CONSTRUCTION PERMIT
APPLICATION**

FOR AGENCY USE ONLY

ID NUMBER: 031300AAJ
PERMIT #: 11100041
COMPLETE ☒ INCOMPLETE ☐ DATE COMPLETE: 10-24-11
CHECK #: 483010322 ACCOUNT NAME: KOPPERS

THIS FORM IS TO BE USED BY ALL SOURCES TO SUPPLY FEE INFORMATION THAT MUST ACCOMPANY ALL CONSTRUCTION PERMIT APPLICATIONS. **THIS APPLICATION MUST INCLUDE PAYMENT IN FULL TO BE DEEMED COMPLETE.** MAKE CHECK OR MONEY ORDER PAYABLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. SEND TO THE ADDRESS ABOVE. DO NOT SEND CASH. REFER TO INSTRUCTIONS (197-INST) FOR ASSISTANCE.

Recd.
\$4,000.

SOURCE INFORMATION

1) SOURCE NAME: Koppers Inc.
2) PROJECT NAME: #2 Tube Heater Reconstr
3) SOURCE ID NO. (IF APPLICABLE): 031300AAJ
4) CONTACT NAME: Richard W. Wagner
5) CONTACT PHONE NUMBER: (708) 222-3483

FEE DETERMINATION

6) FILL IN THE FOLLOWING THREE BOXES AS DETERMINED IN SECTIONS 1 THROUGH 4 BELOW:

\$ 0 + \$ 4,000 = \$ 4,000
SECTION 1 SUBTOTAL SECTION 2, 3 OR 4 SUBTOTAL GRAND TOTAL

SECTION 1: STATUS OF SOURCE / PURPOSE OF SUBMITTAL

7) YOUR APPLICATION WILL FALL UNDER ONLY ONE OF THE FOLLOWING SIX CATEGORIES DESCRIBED BELOW. CHECK THE BOX THAT APPLIES, ENTER THE CORRESPONDING FEE IN THE BOX TO THE RIGHT AND COPY THIS FEE INTO THE SECTION 1 SUBTOTAL BOX ABOVE. PROCEED TO APPLICABLE SECTIONS.

FOR PURPOSES OF THIS FORM:

- **MAJOR SOURCE** IS A SOURCE THAT IS REQUIRED TO OBTAIN A CAAPP PERMIT.
- **SYNTHETIC MINOR SOURCE** IS A SOURCE THAT HAS TAKEN LIMITS ON POTENTIAL TO EMIT IN A PERMIT TO AVOID CAAPP PERMIT REQUIREMENTS (E.G., FESOP).
- **NON-MAJOR SOURCE** IS A SOURCE THAT IS NOT A MAJOR OR SYNTHETIC MINOR SOURCE.

- ☒ EXISTING SOURCE WITHOUT STATUS CHANGE OR WITH STATUS CHANGE FROM SYNTHETIC MINOR TO MAJOR SOURCE OR VICE VERSA. ENTER \$0 AND PROCEED TO SECTION 2.
- ☐ EXISTING NON-MAJOR SOURCE THAT WILL BECOME SYNTHETIC MINOR OR MAJOR SOURCE. ENTER \$5,000 AND PROCEED TO SECTION 4.
- ☐ EXISTING MAJOR OR SYNTHETIC MINOR SOURCE THAT WILL BECOME NON-MAJOR SOURCE. ENTER \$4,000 AND PROCEED TO SECTION 3.
- ☐ NEW MAJOR OR SYNTHETIC MINOR SOURCE. ENTER \$5,000 AND PROCEED TO SECTION 4.
- ☐ NEW NON-MAJOR SOURCE. ENTER \$500 AND PROCEED TO SECTION 3.
- ☐ AGENCY ERROR. IF THIS IS A TIMELY REQUEST TO CORRECT AN ISSUED PERMIT THAT INVOLVES ONLY AN AGENCY ERROR AND IF THE REQUEST IS RECEIVED WITHIN THE DEADLINE FOR A PERMIT APPEAL TO THE POLLUTION CONTROL BOARD, THEN ENTER \$0. SKIP SECTIONS 2, 3 AND 4. PROCEED DIRECTLY TO SECTION 5.

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Illinois Environmental Protection Agency
BUREAU OF AIR
SECTION 1
STATE OF ILLINOIS
SUBTOTAL

SECTION 2: SPECIAL CASE FILING FEE


- 8) **FILING FEE.** IF THE APPLICATION ONLY ADDRESSES ONE OR MORE OF THE FOLLOWING, CHECK THE APPROPRIATE BOXES, ENTER \$500 IN THE SECOND BOX UNDER FEE DETERMINATION ABOVE, SKIP SECTIONS 3 AND 4 AND PROCEED DIRECTLY TO SECTION 5. OTHERWISE, PROCEED TO SECTION 3 OR 4, AS APPROPRIATE.
- ☐ ADDITION OR REPLACEMENT OF CONTROL DEVICES ON PERMITTED UNITS
 - ☐ PILOT PROJECTS/TRIAL BURNS BY A PERMITTED UNIT
 - ☐ APPLICATIONS ONLY INVOLVING INSIGNIFICANT ACTIVITIES UNDER 35 IAC 201.210 (MAJOR SOURCES ONLY)
 - ☐ LAND REMEDIATION PROJECTS
 - ☐ REVISIONS RELATED TO METHODOLOGY OR TIMING FOR EMISSION TESTING
 - ☐ MINOR ADMINISTRATIVE-TYPE CHANGE TO A PERMIT

THIS AGENCY IS AUTHORIZED TO REQUIRE AND YOU MUST DISCLOSE THIS INFORMATION UNDER 415 ILCS 5/39. FAILURE TO DO SO COULD RESULT IN THE APPLICATION BEING DENIED AND PENALTIES UNDER 415 ILCS 5 ET SEQ. IT IS NOT NECESSARY TO USE THIS FORM IN PROVIDING THIS INFORMATION. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE 2

SECTION 3: FEES FOR CURRENT OR PROJECTED NON-MAJOR SOURCES		
9) IF THIS APPLICATION CONSISTS OF A SINGLE NEW EMISSION UNIT <u>OR</u> NO MORE THAN TWO MODIFIED EMISSION UNITS, ENTER \$500.	9)	
10) IF THIS APPLICATION CONSISTS OF MORE THAN ONE NEW EMISSION UNIT <u>OR</u> MORE THAN TWO MODIFIED UNITS, ENTER \$1,000.	10)	
11) IF THIS APPLICATION CONSISTS OF A NEW SOURCE OR EMISSION UNIT SUBJECT TO SECTION 39.2 OF THE ACT (I.E., LOCAL SITING REVIEW); A COMMERCIAL INCINERATOR OR A MUNICIPAL WASTE, HAZARDOUS WASTE, OR WASTE TIRE INCINERATOR; A COMMERCIAL POWER GENERATOR; OR AN EMISSION UNIT DESIGNATED AS A COMPLEX SOURCE BY AGENCY RULEMAKING, ENTER \$15,000.	11)	
12) IF A PUBLIC HEARING IS HELD (SEE INSTRUCTIONS), ENTER \$10,000.	12)	
13) SECTION 3 SUBTOTAL (ADD LINES 9 THROUGH 12) TO BE ENTERED ON PAGE 1.	13)	0

SECTION 4: FEES FOR CURRENT OR PROJECTED MAJOR OR SYNTHETIC MINOR SOURCES			
Application Contains Modified Emission Units Only	14) FOR THE FIRST MODIFIED EMISSION UNIT, ENTER \$2,000.	14)	
	15) NUMBER OF ADDITIONAL MODIFIED EMISSION UNITS = _____ X \$1,000.	15)	
	16) LINE 14 PLUS LINE 15, OR \$5,000, WHICHEVER IS LESS.	16)	
Application Contains New And/Or Modified Emission Units	17) FOR THE FIRST NEW EMISSION UNIT, ENTER \$4,000.	17)	4000
	18) NUMBER OF ADDITIONAL NEW AND/OR MODIFIED EMISSION UNITS = _____ X \$1,000.	18)	
	19) LINE 17 PLUS LINE 18, OR \$10,000, WHICHEVER IS LESS.	19)	4000
Application Contains Netting Exercise	20) NUMBER OF INDIVIDUAL POLLUTANTS THAT RELY ON A NETTING EXERCISE OR CONTEMPORANEOUS EMISSIONS DECREASE TO AVOID APPLICATION OF PSD OR NONATTAINMENT NSR = _____ X \$3,000.	20)	
Additional Supplemental Fees	21) IF THE NEW SOURCE OR EMISSION UNIT IS SUBJECT TO SECTION 39.2 OF THE ACT (I.E., SITING); A COMMERCIAL INCINERATOR OR OTHER MUNICIPAL WASTE, HAZARDOUS WASTE, OR WASTE TIRE INCINERATOR; A COMMERCIAL POWER GENERATOR; OR ONE OR MORE OTHER EMISSION UNITS DESIGNATED AS A COMPLEX SOURCE BY AGENCY RULEMAKING, ENTER \$25,000.	21)	
	22) IF THE SOURCE IS A NEW MAJOR SOURCE SUBJECT TO PSD, ENTER \$12,000.	22)	
	23) IF THE PROJECT IS A MAJOR MODIFICATION SUBJECT TO PSD, ENTER \$6,000.	23)	
	24) IF THIS IS A NEW MAJOR SOURCE SUBJECT TO NONATTAINMENT (NAA) NSR, ENTER \$20,000.	24)	
	25) IF THIS IS A MAJOR MODIFICATION SUBJECT TO NAA NSR, ENTER \$12,000.	25)	
	26) IF APPLICATION INVOLVES A DETERMINATION OF CLEAN UNIT STATUS AND THEREFORE IS NOT SUBJECT TO BACT OR LAER, ENTER \$5,000 PER UNIT FOR WHICH A DETERMINATION IS REQUESTED OR OTHERWISE REQUIRED. _____ X \$5,000.	26)	
	27) IF APPLICATION INVOLVES A DETERMINATION OF MACT FOR A POLLUTANT AND THE PROJECT IS NOT SUBJECT TO BACT OR LAER FOR THE RELATED POLLUTANT UNDER PSD OR NSR (E.G., VOM FOR ORGANIC HAP), ENTER \$5,000 PER UNIT FOR WHICH A DETERMINATION IS REQUESTED OR OTHERWISE REQUIRED. _____ X \$5,000.	27)	
	28) IF A PUBLIC HEARING IS HELD (SEE INSTRUCTIONS), ENTER \$10,000.	28)	
29) SECTION 4 SUBTOTAL (ADD LINES 16 AND LINES 19 THROUGH 28) TO BE ENTERED ON PAGE 1.		29)	4000

SECTION 5: CERTIFICATION	
NOTE: APPLICATIONS WITHOUT A SIGNED CERTIFICATION WILL BE DEEMED INCOMPLETE.	
30) I CERTIFY UNDER PENALTY OF LAW THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE INFORMATION CONTAINED IN THIS FEE APPLICATION FORM IS TRUE, ACCURATE AND COMPLETE.	
BY: 	Plant Manager
SIGNATURE	TITLE OF SIGNATORY
Richard W. Wagner	10 / 20 / 11
TYPED OR PRINTED NAME OF SIGNATORY	DATE



Illinois Environmental Protection Agency
Division Of Air Pollution Control – Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Construction Permit Application for a Proposed Project at a CAAPP Source	For Illinois EPA use only
	ID No.: <u>031300AAJ</u>
	Appl. No.: <u>11100041</u>
	Date Rec'd: <u>10-24-11</u>
Chk No./Amt: <u>483010322</u>	

This form is to be used to supply general information to obtain a construction permit for a proposed project involving a Clean Air Act Permit Program (CAAPP) source, including construction of a new CAAPP source. Detailed information about the project must also be included in a construction permit application, as addressed in the "General Instructions For Permit Applications," Form APC-201.

\$4,000.

Proposed Project	
1. Working Name of Proposed Project: #2 Tube Heater Reconstruction	
2. Is the project occurring at a source that already has a permit from the Bureau of Air (BOA)? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If Yes, provide BOA ID Number: <u>031300AAJ</u>	
3. Does this application request a revision to an existing construction permit issued by the BOA? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If Yes, provide Permit Number: _____	
4. Brief Description of Proposed Project: See Attachment A	

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Source Information		
1. Source name:* Koppers Inc.		
2. Source street address:* 3900 S. Laramie Avenue		
3. City: Cicero	4. County: Cook	5. Zip code:* 60804
ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER.		
6. Is the source located within city limits? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, provide Township Name: _____		
7. Description of source and product(s) produced: Carbon materials and chemicals		8. Primary Classification Code of source: SIC: _____ or NAICS: _____
9. Latitude (DD:MM:SS.SSSS):		10. Longitude (DD:MM:SS.SSSS):

* Is information different than previous information? ☐ Yes ☒ No
If yes, then complete Form CAAPP 273 to apply for an Administrative Change to the CAAPP Permit for the source.

Identification of Permit Applicant	
1. Who is the applicant? <input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator	2. All correspondence to: (check one) <input checked="" type="checkbox"/> Source <input type="checkbox"/> Owner <input type="checkbox"/> Operator
3. Applicant's FEIN: 25-1588399	4. Attention name and/or title for written correspondence: Richard W. Wagner

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Owner Information*		
1. Name: See Source Information Above..		
2. Address:		
3. City:	4. State:	5. Zip code:

* Is this information idifferent than previous information? ☐ Yes ☒ No
 If yes, then complete Form CAAPP 273 to apply for an Administrative Change to the CAAPP Permit for the source.

Operator Information (if different from owner)*		
1. Name See Source Information Above.		
2. Address:		
3. City:	4. State:	5. Zip code:

* Is this information different than previous information? ☐ Yes ☒ No
 If yes, then complete Form CAAPP 273 to apply for an Administrative Change to the CAAPP Permit for the source.

Technical Contacts for Application	
1. Preferred technical contact: (check one) <input checked="" type="checkbox"/> Applicant's contact <input type="checkbox"/> Consultant	
2. Applicant's technical contact person for application: Stephanie Flynn	
3. Contact person's telephone number(s): 708-222-3481	4. Contact person's e-mail address: flynnsm@koppers.com
5. Consultant for application: Environmental Resources Management	
6. Consultant's telephone number(s): 414-289-9505	7. Consultant's e-mail address: bernie.evans@erm.com

Other Addresses for the Permit Applicant	
ONLY COMPLETE THE FOLLOWING FOR A SOURCE WITHOUT AN ID NUMBER.	
1. Address for billing Site Fees for the source: <input type="checkbox"/> Source <input type="checkbox"/> Other (provide below):	
2. Contact person for Site Fees:	3. Contact person's telephone number:
4. Address for Annual Emission Report for the source: <input type="checkbox"/> Source <input type="checkbox"/> Other (provide below):	
5. Contact person for Annual Emission Report:	6. Contact person's telephone number:

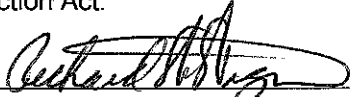
Review Of Contents of the Application	
NOTE: ANSWERING "NO" TO THESE ITEMS MAY RESULT IN THE APPLICATION BEING DEEMED INCOMPLETE	
1. Does the application include a narrative description of the proposed project?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Does the application clearly identify the emission units and air pollution control equipment that are part of the project?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Does the application include process flow diagram(s) for the project showing new and modified emission units and control equipment, along with associated existing equipment and their relationships?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
4. Does the application include a general description of the source, a plot plan for the source and a site map for its location?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A* * Material previously provided
5. Does the application include relevant technical information for the proposed project as requested on CAAPP application forms (or otherwise contain all relevant technical information)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
6. Does the application include relevant supporting data and information for the proposed project as provided on CAAPP forms?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Does the application identify and address all applicable emission standards for the proposed project, including: State emission standards (35 IAC Chapter I, Subtitle B); Federal New Source Performance Standards (40 CFR Part 60)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
8. Does the application address whether the project would be a major project for Prevention of Significant Deterioration, 40 CFR 52.21?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
9. Does the application address whether the project would be a major project for "Nonattainment New Source Review," 35 IAC Part 203?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
10. Does the application address whether the proposed project would potentially be subject to federal regulations for Hazardous Air Pollutants (40 CFR Part 63) and address any emissions standards for hazardous air pollutants that would be applicable?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A* * Source not major <input type="checkbox"/> Project not major <input type="checkbox"/>
11. Does the application include a summary of annual emission data for different pollutants for the proposed project (tons/year), including: 1) The requested permitted emissions for individual new, modified and affected existing units*, 2) The past actual emissions and change in emissions for individual modified units* and affected existing units*, and 3) Total emissions consequences of the proposed project? (* Or groups of related units)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A * The project does not involve an increase in emissions from new or modified emission units.
12. Does the application include a summary of the current and requested potential emissions of the source (tons/year)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A* * Applicability of PSD, NA NSR or 40 CFR 63 to the project is not related to the source's emissions.
13. Does the application address the relationships and implications of the proposed project on the CAAPP Permit for the source?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A* * CAAPP Permit not issued
14. If the application contains information that is considered a TRADE SECRET, has it been properly marked and claimed and all requirements to properly support the claim pursuant to 35 IAC Part 130 been met? Note: "Claimed" information will not be legally protected from disclosure to the public if it is not properly claimed or does not qualify as trade secret information.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A* * No information in the application is claimed to be a TRADE SECRET
15. Are the correct number of copies of the application provided? (See Instructions for Permit Applications, Form 201)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
16. Does the application include a completed "FEE DETERMINATION FOR CONSTRUCTION PERMIT APPLICATION," Form 197-FEE, a check in the amount indicated on this form, and any supporting material needed to explain how the fee was determined?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Signature Block

Authorized Signature:

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete and that I am a responsible official for the source, as defined by Section 39.5(1) of the Environmental Protection Act.

BY:



AUTHORIZED SIGNATURE

Richard W. Wagner

TYPED OR PRINTED NAME OF SIGNATORY

Plant Manager

TITLE OF SIGNATORY

10

20

11

DATE

ATTACHMENT 1

**APPLICATION PACKAGE
#2 TUBE HEATER RECONSTRUCTION
KOPPERS, INC.
STICKNEY PLANT**



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL – PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE

Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

PROCESS EMISSION UNIT DATA AND INFORMATION	FOR AGENCY USE ONLY
	ID NUMBER: _____
	EMISSION POINT #: _____
	DATE: _____

SOURCE INFORMATION	
1) SOURCE NAME: Koppers Inc.	
2) DATE FORM PREPARED: 10/5/2011	3) SOURCE ID NO. (IF KNOWN): 031300AAJ

GENERAL INFORMATION	
4) NAME OF EMISSION UNIT: #2 Tube Heater, F201	
5) NAME OF PROCESS: Tar Plant Distillation Still #2 (TPDS2)	
6) DESCRIPTION OF PROCESS: Combustion of Natural Gas to provide process heat	
7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED: Process Heat	
8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT: F201	
9) MANUFACTURER OF EMISSION UNIT (IF KNOWN): N/A	
10) MODEL NUMBER (IF KNOWN): N/A	11) SERIAL NUMBER (IF KNOWN): N/A
12) DATES OF COMMENCING CONSTRUCTION, OPERATION AND/OR MOST RECENT MODIFICATION OF THIS EMISSION UNIT (ACTUAL OR PLANNED)	a) CONSTRUCTION (MONTH/YEAR): 12/72
	b) OPERATION (MONTH/YEAR): As soon as approval granted
	c) LATEST MODIFICATION (MONTH/YEAR):
13) DESCRIPTION OF MODIFICATION (IF APPLICABLE): Install new 14 mm BTU/HR natural gas burner, fuel train, an economizer, a replacement coil (spare or new) and new exhaust stack. Koppers will recommission the foundation and casing of former Naphthalene Heater F001 and pipe it to the #2 still (TPDS2) renaming it #2 Tube Heater (F201).	

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE 9

Printed on Recycled Paper
220-CAAPP

FOR APPLICANT'S USE

14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM (NOTE: A SEPARATE PROCESS EMISSION UNIT FORM 220-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

F201: This unit will replace #2 tube heater to serve as process heater for the #2 still (TPDS2).

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? ☐ YES ☒ NO

IF YES, COMPLETE AND ATTACH FORM 203-CAAPP, "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

N/A

OPERATING INFORMATION				
18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 220-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.				
19a) MAXIMUM OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
b) TYPICAL OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 5	WEEKS/YEAR: 52	
20) ANNUAL THROUGHPUT	DEC-FEB(%): 20	MAR-MAY(%): 24	JUN-AUG(%): 30	SEP-NOV(%): 26

MATERIAL USAGE INFORMATION				
21a) RAW MATERIALS	MAXIMUM RATES		TYPICAL RATES	
	LBS/HR	TONS/YEAR	LBS/HR	TONS/YEAR
Crude (Distilled) Tar	45,662	200,000	32,820	102,400

21b) PRODUCTS	MAXIMUM RATES		TYPICAL RATES	
	LBS/HR	TONS/YEAR	LBS/HR	TONS/YEAR

21c) BY-PRODUCT MATERIALS	MAXIMUM RATES		TYPICAL RATES	
	LBS/HR	TONS/YEAR	LBS/HR	TONS/YEAR

FUEL USAGE DATA		
22a) MAXIMUM FIRING RATE (MILLION BTU/HR): 14 mm BTU/HR	b) TYPICAL FIRING RATE (MILLION BTU/HR): 14 mm BTU/HR	c) DESIGN CAPACITY FIRING RATE (MILLION BTU/HR): 14 mm BTU/HR
d) FUEL TYPE: <input checked="" type="checkbox"/> NATURAL GAS <input type="checkbox"/> FUEL OIL: GRADE NUMBER _____ <input type="checkbox"/> COAL <input type="checkbox"/> OTHER Tar Still Gases IF MORE THAN ONE FUEL IS USED, ATTACH AN EXPLANATION AND LABEL AS EXHIBIT 220-2.		
e) TYPICAL HEAT CONTENT OF FUEL (BTU/LB, BTU/GAL OR BTU/SCF): 1,020 BTU/SCF	f) TYPICAL SULFUR CONTENT (WT %, NA FOR NATURAL GAS): N/A	
g) TYPICAL ASH CONTENT (WT %, NA FOR NATURAL GAS): N/A	h) ANNUAL FUEL USAGE (SPECIFY UNITS, E.G., SCF/YEAR, GAL/YEAR, TON/YEAR): 122,640,000 SCF/YEAR	
23) ARE COMBUSTION EMISSIONS DUCTED TO THE SAME STACK OR CONTROL AS PROCESS UNIT EMISSIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF NO, IDENTIFY THE EXHAUST POINT FOR COMBUSTION EMISSIONS:		

APPLICABLE RULES

24) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., VOM, IAC 218.204(j)(4), 3.5 LBS/GAL):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
VOM	IAC 218.302(b)	85% Reduction Efficiency
SO2	IAC 214.301	<2,000 PPM

25) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
N/A		

26) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
All	IAC 201.302(a)	Annual Emission Report

27) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
N/A		

28) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
N/A		

29) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE?

☐ YES ☒ NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 220-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

30) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS?

☒ YES ☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE – ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

31) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Manufacturer's Guarantee of VOM Control

Efficiency of greater than 85%

32) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Manufacturer's Guarantee of VOM Control

Efficiency of greater than 85%

TESTING, MONITORING, RECORDKEEPING AND REPORTING

33a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
Distilled Tar	Gallons	Production Records	Monthly

33b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
Distilled Tar	File	Superintendent	Env. Manager

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS?

☒ YES

☐ NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND SUBMITTAL TO THE AGENCY UPON REQUEST?

☒ YES

☐ NO

IF NO, EXPLAIN:

34a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

N/A

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED (E.G., VOM EMISSIONS TO ATMOSPHERE)?

N/A

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., IN STACK MONITOR 3 FEET FROM EXIT):

N/A

34d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE? <div style="float: right;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div>				
IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE: N/A				
e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS? <div style="float: right;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div>				
IF NO, EXPLAIN: N/A				
f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION? <div style="float: right;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div>				
IF NO, EXPLAIN: N/A				
35) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 220-4:				
TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
N/A				
36) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:				
REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY		
All Emissions	Annual Emission Report	Annual		

(37) EMISSION INFORMATION

REGULATED AIR POLLUTANT		1 ACTUAL EMISSION RATE 1 UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE			2 PERMITTED EMISSION RATE	
		LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	3 OTHER TERMS	3 OTHER TERMS	4 DM	5 RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)
CARBON MONOXIDE (CO)	MAXIMUM:	See	240	CAAPP	Form		()				
	TYPICAL:						()				
LEAD	MAXIMUM:						()				
	TYPICAL:						()				
NITROGEN OXIDES (NOx)	MAXIMUM:						()				
	TYPICAL:						()				
PARTICULATE MATTER (PART)	MAXIMUM:						()				
	TYPICAL:						()				
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM:						()				
	TYPICAL:						()				
SULFUR DIOXIDE (SO2)	MAXIMUM:						()				
	TYPICAL:						()				
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM:						()				
	TYPICAL:						()				
OTHER, SPECIFY:	MAXIMUM:						()				
	TYPICAL:						()				
EXAMPLE: PARTICULATE MATTER	MAXIMUM	5.00	21.9	0.3 GR/DSCF		1	6.0 (LBS/HR)	212.321	26.28	5.5 LBS/HR	22
	TYPICAL	4.00	14.4	0.24 GR/DSCF		4	5.5 (LBS/HR)	212.321	19.80		

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 220-5.

1 CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED, OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.

2 PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

3 PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)

4 DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)

5 RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION

THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.

39) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT:

See 240 CAAPP Form

40) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS.

41) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT):

42) DISCHARGE HEIGHT ABOVE GRADE (FT):

43) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):

44) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA.

45) EXIT GAS FLOW RATE

a) MAXIMUM (ACFM):

b) TYPICAL (ACFM):

46) EXIT GAS TEMPERATURE

a) MAXIMUM (°F):

b) TYPICAL (°F):

47) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD):

48) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:

NAME

FLOW DIAGRAM DESIGNATION

a)

b)

c)

d)

e)

THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.

49a) LATITUDE:

b) LONGITUDE:

50) UTM ZONE:

b) UTM VERTICAL (KM):

c) UTM HORIZONTAL (KM):



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE

Revision #: _____
Date: ____ / ____ / ____
Page ____ of ____
Source Designation: _____

**FUEL COMBUSTION EMISSION UNIT
DATA AND INFORMATION**

FOR AGENCY USE ONLY

ID NUMBER: _____

EMISSION POINT #: _____

DATE: _____

SOURCE INFORMATION

1) SOURCE NAME:
Koppers Inc.

2) DATE FORM
PREPARED: 10/5/2011

3) SOURCE ID NO.
(IF KNOWN): 031300AAJ

GENERAL INFORMATION

4) NAME OF EMISSION UNIT:

#2 Tube Heater, F201

5) NAME OF PROCESS:

Tar Plant Distillation Still #2 (TPDS2)

6) DESCRIPTION OF PROCESS:

Combustion of Natural Gas and Tar Still Process Gas to provide process heat

7) DESCRIPTION OF ITEM OR MATERIAL PRODUCED OR ACTIVITY ACCOMPLISHED:

Process Heat

8) FLOW DIAGRAM DESIGNATION OF EMISSION UNIT:

F201

9) MANUFACTURER OF EMISSION UNIT (IF KNOWN):
N/A

10) MODEL NUMBER (IF KNOWN):
N/A

11) SERIAL NUMBER (IF KNOWN): N/A

12) DATES OF COMMENCING CONSTRUCTION,
OPERATION AND/OR MOST RECENT MODIFICATION
OF THIS EMISSION UNIT (ACTUAL OR PLANNED)

a) CONSTRUCTION (MONTH/YEAR):

12/72

b) OPERATION (MONTH/YEAR): As soon as approval
granted

c) LATEST MODIFICATION (MONTH/YEAR):

13) DESCRIPTION OF MODIFICATION (IF APPLICABLE):

Install new 14mm BTU/HR natural gas burner, fuel train, an economizer, a replacement coil (spare or new) and new exhaust stack. Koppers will recommission the foundation and casing of former Naphthalene Heater F001 and pipe it to the #2 still (TPDS2) renaming it #2 Tube Heater (F201).

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER ILLINOIS REVISED STATUTES, 1991, AS AMENDED 1992, CHAPTER 111 1/2, PAR. 1039.5. DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION. FAILURE TO DO SO MAY PREVENT THIS FORM FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED. THIS FORM HAS BEEN APPROVED BY THE FORMS MANAGEMENT CENTER.

APPLICATION PAGE 19

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240-CAAPP

FOR APPLICANT'S USE

14) DOES THE EMISSION UNIT HAVE MORE THAN ONE MODE OF OPERATION? ☐ YES ☒ NO

IF YES, EXPLAIN AND IDENTIFY WHICH MODE IS COVERED BY THIS FORM. A SEPARATE 240-CAAPP MUST BE COMPLETED FOR EACH MODE):

15) PROVIDE THE NAME AND DESIGNATION OF ALL AIR POLLUTION CONTROL EQUIPMENT CONTROLLING THIS EMISSION UNIT, IF APPLICABLE (FORM 260-CAAPP AND THE APPROPRIATE 260-CAAPP ADDENDUM FORM MUST BE COMPLETED FOR EACH ITEM OF AIR POLLUTION CONTROL EQUIPMENT):

F201 Tube Heater is a process heater for the #2 still (TPDS2)

16) WILL EMISSIONS DURING STARTUP EXCEED EITHER THE ALLOWABLE EMISSION RATE PURSUANT TO A SPECIFIC RULE, OR THE ALLOWABLE EMISSION LIMIT AS ESTABLISHED BY AN EXISTING OR PROPOSED PERMIT CONDITION? ☐ YES ☒ NO

IF YES, COMPLETE AND ATTACH FORM 203-CAAPP, "REQUEST TO OPERATE WITH EXCESS EMISSIONS DURING STARTUP OF EQUIPMENT".

17) PROVIDE ANY LIMITATIONS ON SOURCE OPERATION AFFECTING EMISSIONS OR ANY WORK PRACTICE STANDARDS (E.G., ONLY ONE UNIT IS OPERATED AT A TIME):

N/A

OPERATING INFORMATION

18) ATTACH THE CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSION RELATED, FROM WHICH THE FOLLOWING OPERATING INFORMATION, MATERIAL USAGE INFORMATION AND FUEL USAGE DATA WERE BASED AND LABEL AS EXHIBIT 240-1. REFER TO SPECIAL NOTES OF FORM 202-CAAPP.

19a) MAXIMUM OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 7	WEEKS/YEAR: 52	
b) TYPICAL OPERATING HOURS	HOURS/DAY: 24	DAYS/WEEK: 5	WEEKS/YEAR: 52	
20) ANNUAL THROUGHPUT	DEC-FEB(%): 20	MAR-MAY(%): 24	JUN-AUG(%): 30	SEP-NOV(%): 26

FIRING RATE INFORMATION

21a) RATED OR DESIGN HEAT INPUT CAPACITY (MILLION BTU/HR):

14 mm BTU/HR

b) IS MORE THAN ONE FUEL FIRED AT A TIME?

☒ YES ☐ NO

IF YES, EXPLAIN:

The reconstructed #2 Tube Heater (F201) will combust process gases from the #2 Tar Still (TPDS2).

21c) IF HEAT INPUT CAPACITY IS 100 MILLION BTU/HOUR OR GREATER, PROVIDE FURNACE VOLUME (CUBIC FEET)
 NOTE: FURNACE VOLUME IS DEFINED AS THAT VOLUME BOUNDED BY THE FRONT FURNACE WALL WHERE THE BURNER IS LOCATED, THE FURNACE SIDE WATERWALL, AND EXTENDING TO THE LEVEL JUST BELOW OR IN FRONT OF THE FIRST ROW OF CONVECTION PASS TUBES.

N/A

	NATURAL GAS	FUEL OIL	COAL	OTHER
d) SINGLE FUEL (MAXIMUM - MILLION BTU/HOUR)	N/A	N/A	N/A	N/A
e) SINGLE FUEL (TYPICAL - MILLION BTU/HOUR)	N/A	N/A	N/A	N/A
f) COMBINED FUEL (TYPICAL - MILLION BTU/HOUR) (IF APPLICABLE)	N/A	N/A	N/A	N/A

NATURAL GAS FIRING		
22a) CURRENT ORIGIN OF NATURAL GAS:		
<input checked="" type="checkbox"/> PIPELINE (FIRM CONTRACT) <input type="checkbox"/> BY-PRODUCT, SPECIFY ORIGIN: _____		
<input type="checkbox"/> PIPELINE (INTERRUPTIBLE SUPPLY CONTRACT) <input type="checkbox"/> OTHER, - SPECIFY: _____		
b) TYPICAL HEAT CONTENT (BTU/SCF):		
1,020		
c) MAXIMUM CONSUMPTION	SCF/MONTH: 9,408,000	SCF/YEAR: 122,640,000
d) TYPICAL CONSUMPTION	SCF/MONTH: 9,408,000	SCF/YEAR: 122,640,000

OIL FIRING		
23a) OIL TYPE (CHECK ONE):		
<input type="checkbox"/> NO. 1 <input type="checkbox"/> NO. 2 <input type="checkbox"/> NO. 4 <input type="checkbox"/> NO. 5 <input type="checkbox"/> NO. 6		
<input type="checkbox"/> OTHER, SPECIFY (INCLUDE GENERATOR OR SUPPLIER): _____ N/A		
b) TYPICAL HEAT CONTENT:		c) IS OIL USED ONLY AS A RESERVE FUEL?
<input type="checkbox"/> BTU/LB - OR - <input type="checkbox"/> BTU/GAL		<input type="checkbox"/> YES <input type="checkbox"/> NO
d) TYPICAL SULFUR CONTENT AS FIRED (WT %):		e) TYPICAL ASH CONTENT AS FIRED (WT %):
f) MAXIMUM CONSUMPTION	GAL/MONTH:	GAL/YEAR:
g) TYPICAL CONSUMPTION	GAL/MONTH:	GAL/YEAR:
h) FIRING DIRECTION:		
<input type="checkbox"/> HORIZONTAL <input type="checkbox"/> TANGENTIAL <input type="checkbox"/> OTHER, SPECIFY: _____		

SOLID FUEL FIRING		
*24a) SOLID FUEL TYPE (CHECK ALL THAT APPLY): <input type="checkbox"/> SUB-BITUMINOUS COAL <input type="checkbox"/> LIGNITE COAL <input type="checkbox"/> BITUMINOUS COAL <input type="checkbox"/> ANTHRACITE COAL <input type="checkbox"/> OTHER, SPECIFY: _____		
b) TYPICAL HEAT CONTENT AS FIRED (BTU/LB): N/A	c) TYPICAL MOISTURE CONTENT AS FIRED (WT %):	
d) TYPICAL SULFUR CONTENT AS FIRED (WT %):	e) TYPICAL ASH CONTENT AS FIRED (WT %):	
f) TYPICAL FINES CONTENT (% LESS THAN 1/8 INCH):	g) IS THE COAL CLEANED? <div style="text-align: right;"> <input type="checkbox"/> YES <input type="checkbox"/> NO </div>	
h) HOW MUCH COAL REFUSE IS IN THE FUEL? (WT %):		
i) MAXIMUM CONSUMPTION	TON/MONTH:	TON/YEAR:
j) TYPICAL CONSUMPTION	TON/MONTH:	TON/YEAR:
k) FIRING TYPE (CHECK ONE): <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <input type="checkbox"/> TRAVELING GRATE </div> <div style="text-align: center;"> <input type="checkbox"/> SPREADER STOKER % REINJECTION: </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <input type="checkbox"/> CYCLONE </div> <div style="text-align: center;"> <input type="checkbox"/> PULVERIZED, TYPE (CIRCLE ONE): WET BOTTOM DRY BOTTOM </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <input type="checkbox"/> HORIZONTALLY OPPOSED </div> <div style="text-align: center;"> <input type="checkbox"/> OTHER, SPECIFY: _____ </div> </div>		

***NOTE:** IF REQUIRED, SUBMIT COPIES OF THOSE PORTIONS OF COAL SUPPLY CONTRACTS WHICH SET FORTH THE SPECIFICATIONS OF THE FUEL AND THE DURATION OF THE CONTRACT. IF THE ACTUAL FUEL FIRED IS A BLEND OF COAL, SUBMIT APPROPRIATE PORTIONS OF ALL FUEL CONTRACTS AND STATE THE MANNER BY WHICH THE FUELS ARE BLENDED AND ACTUALLY FIRED. ATTACH AND LABEL AS EXHIBIT 240-2.

OTHER FUEL FIRING		
25a) OTHER FUEL FIRING	TYPE	SUPPLIER
a)	Waste Gas	Process ByProduct
b)		
b) TYPICAL HEAT CONTENT (SPECIFY UNITS): TBD	c) TYPICAL NITROGEN CONTENT AS FIRED (WT %):	
d) TYPICAL SULFUR CONTENT AS FIRED (WT %):	e) TYPICAL ASH CONTENT AS FIRED (WT %):	
f) MAXIMUM CONSUMPTION	(SPECIFY UNITS/MONTH):	(SPECIFY UNITS/YEAR):
g) TYPICAL CONSUMPTION	(SPECIFY UNITS/MONTH):	(SPECIFY UNITS/YEAR):

APPLICABLE RULES

26) PROVIDE ANY SPECIFIC EMISSION STANDARD(S) AND LIMITATION(S) SET BY RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT (E.G., PARTICULATE MATTER, IAC 212.206, <= 0.10 LBS/MMBTU):

REGULATED AIR POLLUTANT(S)	EMISSION STANDARD(S)	REQUIREMENT(S)
CO	IAC 216.121	<200 PPM

27) PROVIDE ANY SPECIFIC RECORDKEEPING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	RECORDKEEPING RULE(S)	REQUIREMENT(S)
N/A		

28) PROVIDE ANY SPECIFIC REPORTING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	REPORTING RULE(S)	REQUIREMENT(S)
All	IAC 201.302(a)	Annual Report

29) PROVIDE ANY SPECIFIC MONITORING RULE(S) WHICH ARE APPLICABLE TO THIS EMISSION UNIT:

REGULATED AIR POLLUTANT(S)	MONITORING RULE(S)	REQUIREMENT(S)
N/A		

30) PROVIDE ANY SPECIFIC TESTING RULES AND/OR PROCEDURES WHICH ARE APPLICABLE TO THIS EMISSION UNIT :

REGULATED AIR POLLUTANT(S)	TESTING RULE(S)	REQUIREMENT(S)
N/A		

31) DOES THE EMISSION UNIT QUALIFY FOR AN EXEMPTION FROM AN OTHERWISE APPLICABLE RULE?

☐ YES

☒ NO

IF YES, THEN LIST BOTH THE RULE FROM WHICH IT IS EXEMPT AND THE RULE WHICH ALLOWS THE EXEMPTION. PROVIDE A DETAILED EXPLANATION JUSTIFYING THE EXEMPTION. INCLUDE DETAILED SUPPORTING DATA AND CALCULATIONS. ATTACH AND LABEL AS EXHIBIT 240-3, OR REFER TO OTHER ATTACHMENT(S) WHICH ADDRESS AND JUSTIFY THIS EXEMPTION.

COMPLIANCE INFORMATION

32) IS THE EMISSION UNIT IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS?

☒ YES

☐ NO

IF NO, THEN FORM 294-CAAPP "COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE -- ADDENDUM FOR NON COMPLYING EMISSION UNITS" MUST BE COMPLETED AND SUBMITTED WITH THIS APPLICATION.

33) EXPLANATION OF HOW INITIAL COMPLIANCE IS TO BE, OR WAS PREVIOUSLY, DEMONSTRATED:

Emission calculations using AP-42 emission factors for natural gas combustion and stack test results for tar still gases.

34) EXPLANATION OF HOW ONGOING COMPLIANCE WILL BE DEMONSTRATED:

Emission calculations using AP-42 emission factors for natural gas combustion and stack test results for tar still gases.

TESTING, MONITORING, RECORDKEEPING AND REPORTING

35a) LIST THE PARAMETERS THAT RELATE TO AIR EMISSIONS FOR WHICH RECORDS ARE BEING MAINTAINED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE UNIT OF MEASUREMENT, THE METHOD OF MEASUREMENT, AND THE FREQUENCY OF SUCH RECORDS (E.G., HOURLY, DAILY, WEEKLY):

PARAMETER	UNIT OF MEASUREMENT	METHOD OF MEASUREMENT	FREQUENCY
Natural Gas	Therms	Flow Meter	Monthly

35b) BRIEFLY DESCRIBE THE METHOD BY WHICH RECORDS WILL BE CREATED AND MAINTAINED. FOR EACH RECORDED PARAMETER INCLUDE THE METHOD OF RECORDKEEPING, TITLE OF PERSON RESPONSIBLE FOR RECORDKEEPING, AND TITLE OF PERSON TO CONTACT FOR REVIEW OF RECORDS:

PARAMETER	METHOD OF RECORDKEEPING	TITLE OF PERSON RESPONSIBLE	TITLE OF CONTACT PERSON
Natural Gas	Flow Meter	Utility Engineer	same

c) IS COMPLIANCE OF THE EMISSION UNIT READILY DEMONSTRATED BY REVIEW OF THE RECORDS?

☒ YES ☐ NO

IF NO, EXPLAIN:

d) ARE ALL RECORDS READILY AVAILABLE FOR INSPECTION, COPYING AND SUBMITTAL TO THE AGENCY UPON REQUEST?

☒ YES ☐ NO

IF NO, EXPLAIN:

36a) DESCRIBE ANY MONITORS OR MONITORING ACTIVITIES USED TO DETERMINE FEES, RULE APPLICABILITY OR COMPLIANCE:

N/A

b) WHAT PARAMETER(S) IS(ARE) BEING MONITORED (E.G., OPACITY)?

N/A

c) DESCRIBE THE LOCATION OF EACH MONITOR (E.G., IN STACK MONITOR):

N/A

36d) IS EACH MONITOR EQUIPPED WITH A RECORDING DEVICE?

☐ YES ☐ NO

IF NO, LIST ALL MONITORS WITHOUT A RECORDING DEVICE:

N/A

e) IS EACH MONITOR REVIEWED FOR ACCURACY ON AT LEAST A QUARTERLY BASIS?

☐

YES

☐

NO

IF NO, EXPLAIN:

N/A

f) IS EACH MONITOR OPERATED AT ALL TIMES THE ASSOCIATED EMISSION UNIT IS IN OPERATION?

☐

YES

☐

NO

IF NO, EXPLAIN:

N/A

37) PROVIDE INFORMATION ON THE MOST RECENT TESTS, IF ANY, IN WHICH THE RESULTS ARE USED FOR PURPOSES OF THE DETERMINATION OF FEES, RULE APPLICABILITY OR COMPLIANCE. INCLUDE THE TEST DATE, TEST METHOD USED, TESTING COMPANY, OPERATING CONDITIONS EXISTING DURING THE TEST AND A SUMMARY OF RESULTS. IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL AS EXHIBIT 240-4:

TEST DATE	TEST METHOD	TESTING COMPANY	OPERATING CONDITIONS	SUMMARY OF RESULTS
2/15/95	25A: F201	EMT	Normal	See Exhibit 240-5 and 6

38) DESCRIBE ALL REPORTING REQUIREMENTS AND PROVIDE THE TITLE AND FREQUENCY OF REPORT SUBMITTALS TO THE AGENCY:

REPORTING REQUIREMENTS	TITLE OF REPORT	FREQUENCY
All Emissions	Air Emissions Report	Annually

(39)EMISSION INFORMATION

REGULATED AIR POLLUTANT	<input checked="" type="checkbox"/> 1. ACTUAL EMISSION RATE <input type="checkbox"/> 1. UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE EMISSION RATE				2. PERMITTED EMISSION RATE	
	LBS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	3. OTHER TERMS	3. OTHER TERMS	4. DM	5. RATE (UNITS)	APPLICABLE RULES	TONS PER YEAR (TONS/YR)	RATE (UNITS)	TONS PER YEAR (TONS/YR)	
CARBON MONOXIDE (CO)	MAXIMUM: 0.34	6.54			1	200 (ppm)	216.121	N/A	1.11 lbs/hr	4.87	
	TYPICAL: 0.34	5.23			1	()					
LEAD	MAXIMUM:					()					
	TYPICAL:					()					
NITROGEN OXIDES (NOx)	MAXIMUM: 2.95	19.0			1	()			9.65 lbs/hr	42.27	
	TYPICAL: 2.95	15.2			1	()					
PARTICULATE MATTER (PART)	MAXIMUM: 0.11	0.95			1	()			0.2 lbs/hr	0.86	
	TYPICAL: 0.11	0.76			1	()					
PARTICULATE MATTER <= 10 MICROMETERS (PM10)	MAXIMUM: 0.11	0.95				()					
	TYPICAL: 0.11	0.76				()					
SULFUR DIOXIDE (SO2)	MAXIMUM: 41.4	181.22			1	2000 (ppm)	214.301	N/A	70.82 lbs/hr	310.19	
	TYPICAL: 41.4	144.97			1	()					
VOLATILE ORGANIC MATERIAL (VOM)	MAXIMUM: 1.28	5.94			1	85 (%)	218.302(b)	N/A	7.33 lbs/hr	64.18	
	TYPICAL: 1.28	1.02			1	()					
OTHER, SPECIFY:	MAXIMUM:					()					
	TYPICAL:					()					
EXAMPLE PARTICULATE MATTER	MAXIMUM: 5.00	21.9	0.3 GR/DSCF		1	6.0 (LBS/HR)	212.321	26.28	5.5 LBS/HR	22	
	TYPICAL: 4.00	14.4	0.24 GR/DSCF		4	5.5 (LBS/HR)	212.321	19.80			

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 240-5.

1. CHECK UNCONTROLLED EMISSION RATE BOX IF CONTROL EQUIPMENT IS USED. OTHERWISE CHECK AND PROVIDE THE ACTUAL EMISSION RATE TO ATMOSPHERE, INCLUDING INDOORS. SEE INSTRUCTIONS.
2. PROVIDE THE EMISSION RATE THAT WILL BE USED AS A PERMIT SPECIAL CONDITION. THIS LIMIT WILL BE USED TO DETERMINE THE PERMIT FEE.

3. PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G. PPM, GR/DSCF, ETC.)

4. DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS), 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS)

5. RATE - ALLOWABLE EMISSION RATE SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

APPLICATION PAGE 27

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240-CAAPP

(40) HAZARDOUS AIR POLLUTANT EMISSION INFORMATION

HAP INFORMATION		<input checked="" type="checkbox"/> 1 ACTUAL EMISSION RATE <input type="checkbox"/> 1 UNCONTROLLED EMISSION RATE					ALLOWABLE BY RULE	
NAME OF HAP EMITTED	2 CAS NUMBER	POUNDS PER HOUR (LBS/HR)	TONS PER YEAR (TONS/YR)	3 OTHER TERMS	4 DM	5 RATE OR STANDARD	APPLICABLE RULE	
Benzene	71432	MAXIMUM: N/A TYPICAL: N/A	0.0012 0.0010		4	N/A		
Ethylbenzene	100414	MAXIMUM: N/A TYPICAL: N/A	0.00005 0.00004		4	N/A		
Napthalene	91203	MAXIMUM: N/A TYPICAL: N/A	0.00006 0.00048		4	N/A		
Styrene	100425	MAXIMUM: N/A TYPICAL: N/A	0.000015 0.000012		4	N/A		
Toluene	108883	MAXIMUM: N/A TYPICAL: N/A	0.00056 0.00048		4	N/A		
Creosote Compounds	N/A	MAXIMUM: N/A TYPICAL: N/A	0.000085 0.000068		4	N/A		
O-Xylene	95476	MAXIMUM: N/A TYPICAL: N/A	0.000015 0.000012		4	N/A		
		MAXIMUM: TYPICAL:				N/A		
EXAMPLE: Benzene	71432	MAXIMUM: 10.0 TYPICAL: 8.0	1.2 0.8		2 2	98% by wt control device leak-tight trucks	CFR 61 61.302(b),(d)	

IMPORTANT: ATTACH CALCULATIONS, TO THE EXTENT THEY ARE AIR EMISSIONS RELATED, ON WHICH EMISSIONS WERE DETERMINED AND LABEL AS EXHIBIT 240-6.

1 PROVIDE UNCONTROLLED EMISSIONS IF CONTROL EQUIPMENT IS USED. OTHERWISE, PROVIDE ACTUAL EMISSIONS TO THE ATMOSPHERE, INCLUDING INDOORS. CHECK BOX TO SPECIFY.

2 CAS - CHEMICAL ABSTRACT SERVICE NUMBER.

3 PLEASE PROVIDE ANY OTHER EMISSION RATE WHICH IS COMMONLY USED, REQUIRED BY A SPECIFIC LIMITATION OR THAT WAS MEASURED (E.G., PPM, GR/DSCF, ETC.).

4 DM - DETERMINATION METHOD: 1) STACK TEST, 2) MATERIAL BALANCE, 3) STANDARD EMISSION FACTOR (AP-42 OR AIRS, 4) ENGINEERING ESTIMATE, 5) SPECIAL EMISSION FACTOR (NOT AP-42 OR AIRS).

5 RATE - ALLOWABLE EMISSION RATE OR STANDARD SPECIFIED BY MOST STRINGENT APPLICABLE RULE.

EXHAUST POINT INFORMATION		
THIS SECTION SHOULD NOT BE COMPLETED IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.		
41) FLOW DIAGRAM DESIGNATION OF EXHAUST POINT: See attached Process Flow Diagram		
42) DESCRIPTION OF EXHAUST POINT (STACK, VENT, ROOF MONITOR, INDOORS, ETC.). IF THE EXHAUST POINT DISCHARGES INDOORS, DO NOT COMPLETE THE REMAINING ITEMS. Stack		
43) DISTANCE TO NEAREST PLANT BOUNDARY FROM EXHAUST POINT DISCHARGE (FT): 475		
44) DISCHARGE HEIGHT ABOVE GRADE (FT): 77		
45) GOOD ENGINEERING PRACTICE (GEP) HEIGHT, IF KNOWN (FT):		
46) DIAMETER OF EXHAUST POINT (FT): NOTE: FOR A NON CIRCULAR EXHAUST POINT, THE DIAMETER IS 1.128 TIMES THE SQUARE ROOT OF THE AREA. 2.5		
47) EXIT GAS FLOW RATE	a) MAXIMUM (ACFM): 9000	b) TYPICAL (ACFM): 6450
48) EXIT GAS TEMPERATURE	a) MAXIMUM (°F): 940	b) TYPICAL (°F): 700
49) DIRECTION OF EXHAUST (VERTICAL, LATERAL, DOWNWARD): Vertical		
50) LIST ALL EMISSION UNITS AND CONTROL DEVICES SERVED BY THIS EXHAUST POINT:		
<div style="display: flex; justify-content: space-around;"> NAME FLOW DIAGRAM DESIGNATION </div>		
a) Tar Plant: Stills #2	Tar Plant	
b) Dehydrator	Dehydrator	
c) Decanter	Decanter	
d) Tar Fractionator Unit	Tar Fractionator Unit	
e) Flash	Flash	
THE FOLLOWING INFORMATION NEED ONLY BE SUPPLIED IF READILY AVAILABLE.		
51a) LATITUDE:		b) LONGITUDE:
52) UTM ZONE:	b) UTM VERTICAL (KM):	c) UTM HORIZONTAL (KM):



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

FOR APPLICANT'S USE

Revision #: _____
Date: ____ / ____ / ____
Page _____ of _____
Source Designation: _____

**HAZARDOUS AIR POLLUTANT (HAP)
EMISSION SUMMARY**

FOR AGENCY USE ONLY

ID NO.:

PERMIT NO.:

DATE:

SECTION ONE

SOURCE INFORMATION

- 1) SOURCE NAME: Koppers Inc.
- 2) SOURCE ID NO.: 031300AAJ
- 3) DATE FORM PREPARED: 10 / 04 / 2011

SECTION TWO

INSTRUCTIONS IN BRIEF

- 1) COMPLETE THIS FORM FOR HAZARDOUS AIR POLLUTANT (HAP) INFORMATION FOR THE ENTIRE SOURCE. SECTIONS FOUR, FIVE, AND SIX MAY BE COPIED AS NEEDED FOR ADDITIONAL EMISSION UNITS OR IF ADDITIONAL SPACE IS NEEDED, ATTACH AND LABEL WITH THE APPROPRIATE EMISSION UNIT DESIGNATION.
- 2) A NATURAL MINOR SOURCE FOR HAPS IS A SOURCE WHOSE POTENTIAL TO EMIT HAZARDOUS AIR POLLUTANTS IS LESS THAN THE CRITERIA FOR A MAJOR SOURCE OF HAP EMISSIONS WITHOUT REQUIRING SPECIFIC OPERATIONAL RESTRICTIONS. THE HAP MAJOR SOURCE CRITERIA ARE LISTED IN NUMBER ONE OF SECTION THREE BELOW.
- 3) A SYNTHETIC MINOR SOURCE FOR HAP S IS A SOURCE WHOSE POTENTIAL TO EMIT HAZARDOUS AIR POLLUTANTS IS GREATER THAN THE CRITERIA FOR A MAJOR SOURCE OF HAP EMISSIONS, HOWEVER THE SOURCE IS ABLE TO REQUEST OPERATIONAL RESTRICTIONS WHICH WILL LIMIT THE SOURCE EMISSIONS BELOW THE APPLICABLE CRITERIA. THE HAP MAJOR SOURCE CRITERIA ARE LISTED IN NUMBER ONE OF SECTION THREE BELOW. A SYNTHETIC MINOR SOURCE STATUS MAY BE USED TO AVOID CERTAIN RULE APPLICABILITY (E.G., NESHAP APPLICABILITY).
- 4) A MAJOR SOURCE HAPS IS A SOURCE WHOSE POTENTIAL TO EMIT HAPS IS GREATER THAN THE CRITERIA FOR A MAJOR SOURCE OF HAP EMISSIONS AND THE SOURCE IS UNABLE OR UNWILLING TO REQUEST OPERATIONAL RESTRICTIONS WHICH WILL LIMIT THE SOURCE EMISSIONS BELOW THE APPLICABLE CRITERIA. THE HAP MAJOR SOURCE CRITERIA ARE LISTED IN NUMBER ONE OF SECTION THREE BELOW. A MAJOR SOURCE OF HAPS IS REQUIRED TO OBTAIN A CAAPP PERMIT.
- 5) NATURAL OR SYNTHETIC MINOR STATUS MUST BE ESTABLISHED **BEFORE** THE FIRST REGULATORY COMPLIANCE DATE OF A REGULATION OF CONCERN IN ORDER TO ENSURE THE REGULATION WILL NOT BE APPLICABLE. A SOURCE WHICH IS A MAJOR FOR HAPS PAST THE COMPLIANCE DATE FOR AN APPLICABLE REGULATION MUST COMPLY WITH THE REGULATION.
- 6) INCLUDE EMISSIONS OF HAPS AT ACTIVITIES PROPOSED TO BE INSIGNIFICANT PURSUANT TO 35 IL. ADM. CODE 201.210 AND 201.211.
- 7) FOR THE PURPOSES OF ESTABLISHING WHETHER AN EMISSION UNIT QUALIFIES AS AN INSIGNIFICANT ACTIVITY AND PROVIDING EMISSION DATA FOR AN EMISSION UNIT IN A CAAPP APPLICATION, AN APPLICANT MAY PRESUME THAT AN EMISSION UNIT DOES NOT EMIT AN AIR POLLUTANT LISTED AS HAZARDOUS PURSUANT TO SECTION 112(B) OF THE CLEAN AIR ACT IF IT MEETS THE REQUIREMENTS OF 35 IAC 201.209. IF UTILIZING THIS PROVISION, THE APPLICANT WILL NEED TO COMPLETE THE SUPPLEMENTAL FORM 215A-CAAPP, "EMISSION UNIT WHICH DOES NOT EMIT A HAZARDOUS AIR POLLUTANT".
- 8) REFER TO 215-CAAPP INSTRUCTIONS FOR FURTHER GUIDANCE ON COMPLETING THIS FORM.

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

SECTION THREE		HAZARDOUS AIR POLLUTANT STATUS	
1) DOES THE SOURCE HAVE THE POTENTIAL TO EMIT, IN THE AGGREGATE, THE FOLLOWING? CHECK ALL THAT APPLY.			
I) 10 TONS PER YEAR OR MORE OF ANY INDIVIDUAL HAZARDOUS AIR POLLUTANT.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
II) 25 TONS PER YEAR OR MORE OF ANY COMBINATION OF HAZARDOUS AIR POLLUTANTS.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
III) SUCH LESSER QUANTITY AS ESTABLISHED BY RULE WHICH CLASSIFIES THE SOURCE AS MAJOR FOR HAZARDOUS AIR POLLUTANTS.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
IV) EMISSIONS OF HAZARDOUS AIR POLLUTANTS WHICH EQUAL OR EXCEED A POLLUTANT SPECIFIC CAAPP APPLICABILITY LEVEL AS ESTABLISHED BY USEPA RULE SUCH THAT THE SOURCE IS REQUIRED TO OBTAIN A CAAPP PERMIT SOLELY FOR THIS REASON (I.E., HAP EMISSIONS BELOW THE CAAPP APPLICABILITY THRESHOLDS SPECIFIED IN ITEMS (I), (II) & (III) ABOVE, BUT STILL REQUIRED TO OBTAIN A CAAPP PERMIT PURSUANT TO A REGULATORY REQUIREMENT, E.G., NESHP)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
2) CHOOSE ONE OF THE FOLLOWING FIVE CHOICES FOR THE SOURCE'S HAZARDOUS AIR POLLUTANT STATUS BY SELECTING "YES". SELECT "NO" FOR ALL OTHERS.			
I) IS THE SOURCE A NATURAL MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS? IF "YES" COMPLETE SECTION 4 AND ATTACH A POTENTIAL TO EMIT ANALYSIS FOR THE SOURCE. THE ANALYSIS MUST INCLUDE CALCULATIONS AND ANY NECESSARY SUPPORTING DOCUMENTATION AND ASSUMPTIONS WHICH JUSTIFY THE SOURCE'S TRUE MINOR STATUS.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
II) DOES THE SOURCE REQUEST TO BE CONSIDERED A SYNTHETIC MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS AND ACCEPT THAT THE EMISSIONS OF HAPS FROM THE SOURCE SHALL BE LESS THAN 5 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 12.5 TONS/YEAR FOR ALL HAPS COMBINED? IF "YES" COMPLETE SECTIONS 4, AND PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
III) DOES THE SOURCE REQUEST TO BE CONSIDERED A SYNTHETIC MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS AND ACCEPT THAT THE EMISSIONS OF HAPS FROM THE SOURCE SHALL BE LESS THAN 8 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 20 TONS/YEAR FOR ALL HAPS COMBINED? IF "YES" COMPLETE SECTIONS 4 AND SECTION 5, AND PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
IV) DOES THE SOURCE REQUEST TO BE CONSIDERED A SYNTHETIC MINOR SOURCE FOR HAZARDOUS AIR POLLUTANTS AND ACCEPT THAT THE EMISSIONS OF HAPS FROM THE SOURCE SHALL BE GREATER THAN 8 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 20 TONS/YEAR FOR ALL HAPS COMBINED, BUT LESS THAN 10 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 25 TONS/YEAR FOR ALL HAPS COMBINED? IF "YES" COMPLETE SECTIONS 4, 5, AND 6, AND PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
V) DOES THE SOURCE REQUEST TO BE CONSIDERED A MAJOR SOURCE FOR HAZARDOUS AIR POLLUTANTS? IF "YES" COMPLETE SECTION 4.	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	
3) IF "YES" TO THE QUESTIONS AT SECTION THREE QUESTION 2(II) OR 2(III) OR 2(IV) ABOVE, HAS THE SOURCE PROVIDE AS AN ATTACHMENT THE MOST RECENT FIVE (5) YEARS OF ACTUAL HAP EMISSIONS DATA.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> N/A

THIS AGENCY IS AUTHORIZED TO REQUIRE THIS INFORMATION UNDER 39.5 OF THE ILLINOIS ENVIRONMENTAL PROTECTION ACT, 415 ILCS 5/39.5. FURTHER DISCLOSURE OF THIS INFORMATION IS REQUIRED UNDER THAT SECTION, MOREOVER AS ALSO PROVIDED IN THAT SECTION, FAILURE TO PROVIDE THIS INFORMATION MAY PREVENT THIS APPLICATION FROM BEING PROCESSED AND COULD RESULT IN THE APPLICATION BEING DENIED.

SECTION FOUR**HAZARDOUS AIR POLLUTANT EMISSIONS**

COMPLETE THE FOLLOWING TABLE FOR ALL HAPS. THIS TABLE MUST ALSO INCLUDE EMISSIONS OF HAPS AT ACTIVITIES PROPOSED TO BE EXEMPT PURSUANT TO 35 IAC 201.146 OR INSIGNIFICANT PURSUANT TO 35 IAC 201.210 OR 201.211 UNLESS THOSE EMISSION UNITS DO NOT EMIT A HAP PURSUANT TO 35 IAC 201.209. IF UTILIZING THIS PROVISION, THE APPLICANT WILL NEED TO COMPLETE FORM 215A-CAAPP, "EMISSION UNIT WHICH DOES NOT EMIT A HAZARDOUS AIR POLLUTANT."

EMISSION UNIT DESIGNATION	NAME OF HAP EMITTED	CHEMICAL ABSTRACT SERVICE (CAS) NUMBER	TYPICAL EMISSIONS (TONS/YR)	MAXIMUM EMISSIONS (TONS/YR)	POTENTIAL EMISSIONS (TONS/YR)	APPLICABLE STANDARD(S)
See Exhibit 240-5						

HAP TESTING TO VERIFY MINOR SOURCE STATUS

[illegible]

- 1 LIST THOSE EMISSION UNIT(S) AT THE SOURCE WHICH CONTRIBUTE AT LEAST 1.0 TON/YEAR FOR AN INDIVIDUAL HAP OR 2.5 TONS/YEAR FOR ALL HAPS COMBINED.
- 2 PREDOMINANT HAPS ARE THOSE CONSTITUENT HAP EMISSIONS WHICH CONTRIBUTE GREATER THAN 25% OF THAT EMISSION UNIT'S HAP CONTRIBUTION.
- 3 LIST THE SOURCE'S SUGGESTED HAP TESTING METHODOLOGY: 1) STACK TEST (LIST METHOD), 2) STANDARD TEST METHOD (EXPLAIN), 3) RELEVANT NSPS OR NESHAP TEST
- 4 METHODOLOGY WHICH TESTS FOR HAPS (EXPLAIN), 4) MANUFACTURE'S HAP TESTING (EXPLAIN), 5) OTHER (EXPLAIN)
- 5 LIST THE SOURCE'S SUGGESTED HAP TESTING FREQUENCY.
- 6 EXPLAIN THE RATIONALE AND ADEQUACY OF THE SUGGESTED TESTING.

SECTION SIX PROCESS AND EMISSIONS LIMITATIONS FOR SOURCES REQUESTING HAP LIMITS GREATER THAN 8/20 TONS/YEAR BUT LESS THAN 10/25 TONS/YEAR				
LIMITATIONS SHALL BE TOTALED SUCH THAT THE SOURCE HAP EMISSIONS WILL BE LIMITED TO LESS THAN 10 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 25 TONS/YEAR FOR ALL HAPS COMBINED.				
EMISSION UNIT DESIGNATION	¹ PROCESS LIMITATIONS	² HAP CALCULATION METHODOLOGY	³ HAP EMISSION LIMITATIONS	⁴ RECORDKEEPING
		N/A		

- 1 LIST THE SOURCE'S SUGGESTED PROCESS LIMITATIONS WHICH WILL CONSTRAIN THE PROCESS'S HAP EMISSIONS. PROCESS LIMITATIONS INCLUDE PRODUCTION LIMITS, FUEL USAGE LIMITS, OPERATING RESTRICTIONS, ETC.
- 2 LIST THE SOURCE'S SUGGESTED HAP CALCULATION METHODOLOGY: 1) STACK TEST, 2) STANDARD TEST METHOD (EXPLAIN), 3) MANUFACTURE'S HAP TESTING, 4) MATERIAL BALANCE, 5) EMISSION FACTOR, 6) OTHER (EXPLAIN).
- 3 LIST THE SOURCE'S SUGGESTED HAP EMISSION LIMITATIONS WHICH WILL LIMIT THE SOURCE TO LESS THAN 10 TONS/YEAR FOR EACH INDIVIDUAL HAP AND 25 TONS/YEAR FOR ALL HAPS COMBINED.
- 4 LIST THE SOURCE'S SUGGESTED RECORDKEEPING NEEDED TO DOCUMENT THE PROCESS AND EMISSION LIMITATIONS.

Attachment A

Project Description

#2 Tube Heater (F201) Reconstruction Koppers, Inc. Stickney, Illinois

The #2 heater will be rebuilt 20 feet south on the existing foundation and casing of the former Naphthalene Heater F001.

This new heater will serve the existing #2 still (TPDS2) in the tar distillation process and will be called the #2 Tube Heater (F201). The Koppers Inc. Naphthalene Heater F001 was originally permitted with the IEPA in 1979. Naphthalene Heater F001 was taken out of service and mothballed in the late 1980's. At the time of the application for the initial Clean Air Act Permit Program (CAAPP) permit in the early 1990's, Koppers chose to keep the Naphthalene heater out of service and did not include in the CAAPP permit application.

Koppers is now planning to idle and decommission the existing #2 Tube Heater (F201) that serves the #2 still in the tar distillation process. Koppers will recommission the foundation and casing of former Naphthalene Heater F001 and pipe it to the #2 still (TPDS2) renaming it #2 Tube Heater(F201). New components to be installed include a 14 MMBtu/hr natural gas burner, a fuel train, an economizer, a replacement coil (spare or new), and a new exhaust stack. These expenditures are estimated to be \$400,000, approximately 40% of a completely new tube heater.

The existing #2 Tube Heater also burns process gases from the #2 still (TPDS2). The reconstructed #2 Tube Heater will be used in an identical way once it replaces the original #2 Tube Heater. This project requires no changes to the #2 Still unit and emissions generated from combustion of the still process gases will remain as permitted in the CAAPP Permit number 96030134.

**EXHIBIT 240-5 AND 6
EMISSION CALCULATIONS**

Table 1 - Exhibit 240-5 and 240-6
Tube Heater Summary of Emissions
Koppers, Inc.
Stickney, Illinois

Source	PM/PM ₁₀ Emissions (tpy)	SO _x Emissions (tpy)	NO _x Emissions (tpy)	CO Emissions (tpy)	VOC Emissions (tpy)	Total HAP Emissions (tpy)
No. 2 Tube Heater	0.95	181.22	19	6.54	5.94	0.11

Source	Benzene Emissions (tpy)	Ethylbenzene	Naphthalene	Toluene	O-xylene	Styrene	Creosote	Formaldeh yde Emissions (tpy)	Hexane Emissions (tpy)
No. 2 Tube Heater	1.15E-03	5.00E-05	6.17E-05	5.62E-04	1.50E-05	1.50E-05	8.50E-05	4.51E-03	1.08E-01

For 240 CAAPP Form - Assumed "typical" emissions were 80% of "maximum" emissions.

Table 2 - Exhibit 240-5
Tube Heater Criteria Pollutant Emissions
Koppers, Inc.
Stickney, Illinois

Combustion Emissions - Criteria Pollutants

Source	Potential Hours of Operation	Heat Input Rating (Btu/hr)	Heating Value (Btu/scf)	PM/PM ₁₀ Emissions (tpy)	SO ₂ Emissions (tpy)	NO _x Emissions (tpy)	CO Emissions (tpy)	VOC Emissions (tpy)
No. 2 Tube Heater	8760	14,000,000	1,020	0.46	0.04	6.01	5.05	0.33

AP-42 Emission Factors

Pollutant	Emission Factor (in lb/10 ⁶ scf natural gas)
PM ₁₀	7.6
SO ₂	0.6
NO _x	100
CO	84
VOC	5.5

Still Emissions (combusted in Tube Heater) - Criteria Pollutants

Source	Potential Hours of Operation	PM/PM ₁₀ Emissions (tpy)	SO ₂ Emissions (tpy)	NO _x Emissions (tpy)	CO Emissions (tpy)	VOC Emissions (tpy)
No. 2 Tube Heater	8760	0.496	181.186	12.907	1.489	5.606

Current Title V Permit Emission Factors for Still #2

Pollutant	Emission Factor (lb/still hours operation)
PM ₁₀	0.1133
SO ₂	41.3667
NO _x	2.9467
CO	0.34
VOC	1.28

Table 3 - Exhibit 240-6
Tube Heater Hazardous Air Pollutant Emissions
Koppers, Inc.
Stickney, Illinois

Combustion Emissions - Hazardous Air Pollutants

Source	Potential Hours of Operation	Heat Input Rating (Btu/hr)	Heating Value (Btu/scf)	Benzene Emissions (tpy)	Formaldehyde Emissions (tpy)	Hexane Emissions (tpy)	Naphthalene Emissions (tpy)	Toluene Emissions (tpy)
No. 2 Tube Heater	8760	14,000,000	1,020	1.26E-04	4.51E-03	0.11	3.67E-05	2.04E-04

AP-42 Emission Factors

Pollutant	Emission Factor (in lb/10 ⁶ scf natural gas)
Benzene	2.10E-03
Formaldehyde	7.50E-02
Hexane	1.8
Naphthalene	6.10E-04
Toluene	3.40E-03

Still Emissions (combusted in Tube Heater) - Hazardous Air Pollutants¹

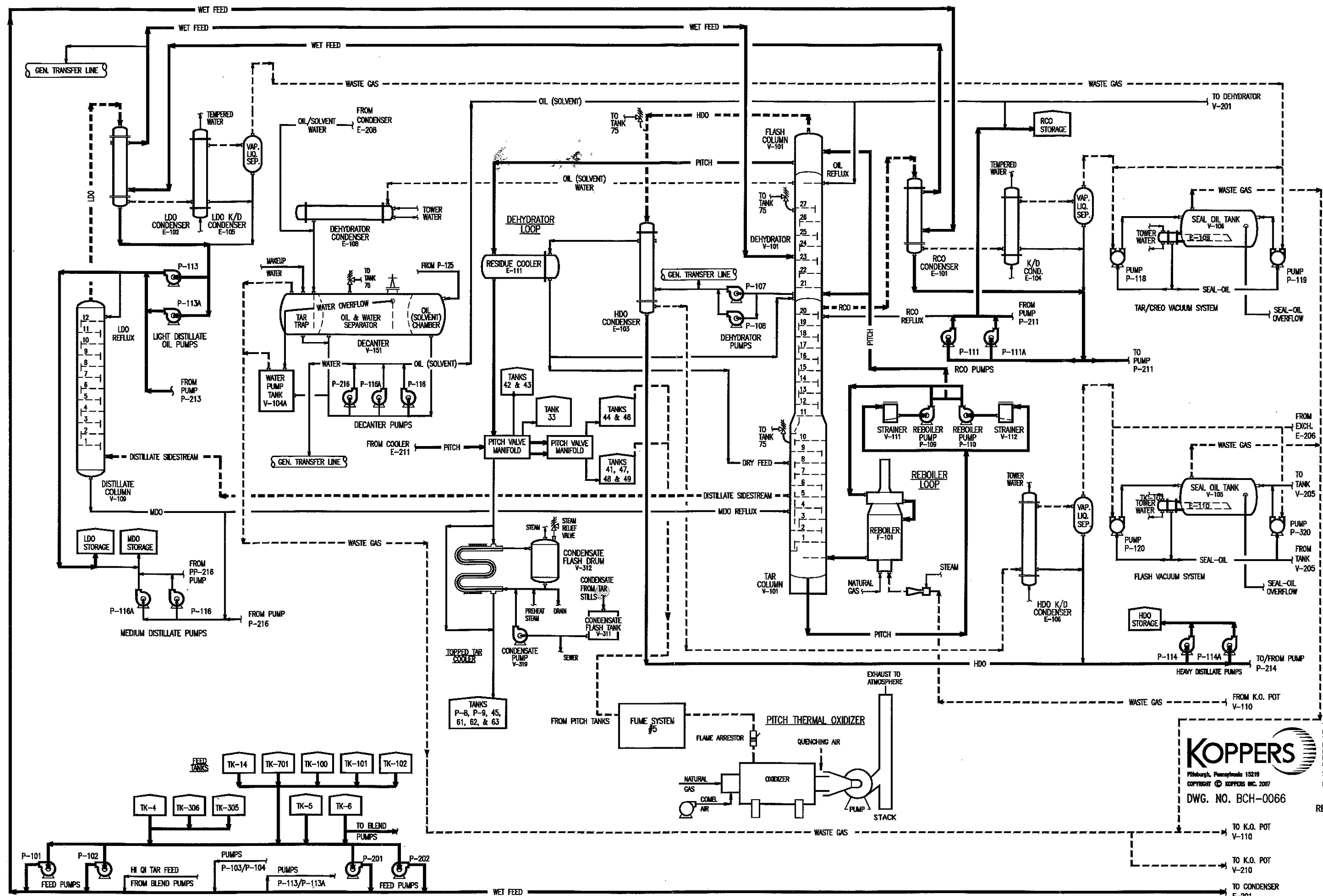
Source	Maximum Throughput (gal)	Benzene Emissions (tpy)	Ethylbenzene	Naphthalene	Toluene	O-xylene	Styrene	Cresosote
No. 2 Tube Heater	40,000,000	1.02E-03	5.00E-05	2.50E-05	5.25E-04	1.50E-05	1.50E-05	8.50E-05

Tube Heater Summary of Emissions

	Benzene Emissions (tpy)	Ethylbenzene	Naphthalene	Toluene	O-xylene	Styrene	Cresosote	Formaldehyde Emissions (tpy)	Hexane Emissions (tpy)
Combustion Emissions	1.26E-04	0.00E+00	3.67E-05	3.67E-05	0.00E+00	0.00E+00	0.00E+00	4.51E-03	0.11
Still Emissions	1.02E-03	5.00E-05	2.50E-05	5.25E-04	1.50E-05	1.50E-05	8.50E-05	0	0
Total	1.15E-03	5.00E-05	6.17E-05	5.62E-04	1.50E-05	1.50E-05	8.50E-05	4.51E-03	1.08E-01

Notes:

¹Hazardous air pollutant emissions based on amount of tar distilled. Still No. 2 maximum throughput capacity is 40,000,000 gallons/year.

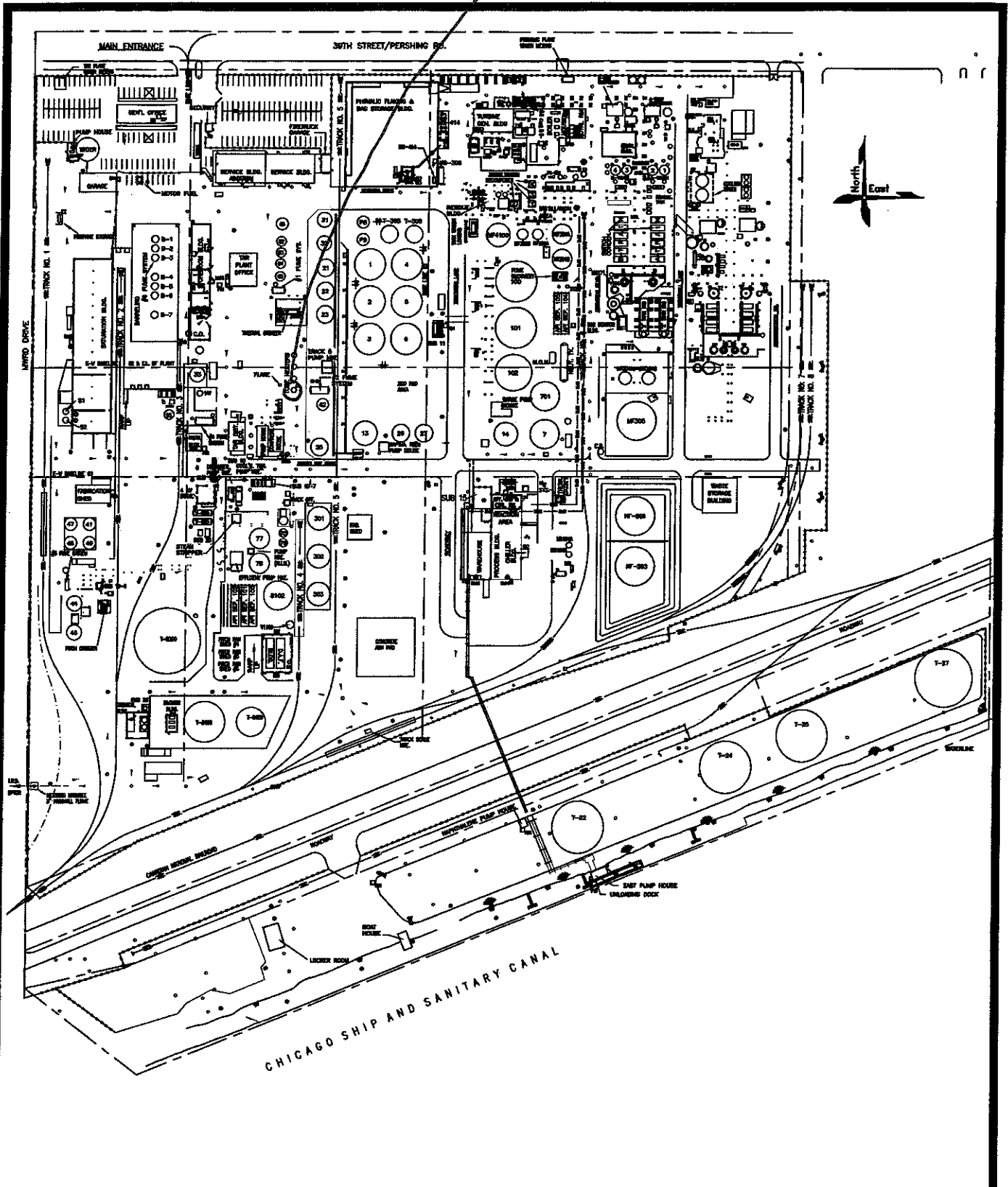


KOPPERS

Pittsburgh, Pennsylvania 15219
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DWG. NO. BCH-0066

REV 1 9-16-11

Location of #2 Tube Heater Reconstruction



Pittsburgh, Pennsylvania 15219
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5	PROPERTY OUTLINES	D. STODOLA	3/28/08
4	REVISE TO REFLECT CURRENT EQUIPMENT	G.M.D.	6/1/07
REV.	DESCRIPTION	DRAWN BY	DATE
CHICAGO	GENERAL	APPRO. No.	PROJECT No.
KOPPERS FACILITY AT 3900 S. LARAMIE AVENUE, CICERO, ILLINOIS		ACH-0062	
		5 REV.	